

REMARKS

Claims 1, 3-6, 8-16, 18-19, 21-23, 25-29, 31-41, 44-46, 48-54, and 63-66 are pending. All of those claims are rejected, except for Claims 64 and 65, which are withdrawn from further consideration.

Claim Rejections Under 35 U.S.C. §103

The Examiner rejects all the pending claims under 35 U.S.C. §103(a) as being obvious over generally a three-patent reference combination, including Anderson, et al., U.S. Patent No. 7,283,635, Michel, et al., U.S. Patent No. 5,764,512, and August, U.S. Patent No. 7,400,712.

Applicants' undersigned representative held a Telephone Interview with the Examiner on March 19, 2009. Applicants would like to thank the Examiner for his time and helpful suggestions during that Interview. No agreement was reached. The prior art was discussed, as were ways of focusing the language of the claims regarding the "terminal". Applicants understand that additional searching may be necessary, and herewith files a Response with a Request for Continued Examination (RCE) for consideration of the amended claims, as well as additional prosecution and searching.

One of the particular features of the present invention, and a feature not particularly appreciated in the most recent Office Action, is that the invention is directed to the efficient use of a portable terminal that may be worn or carried by a user for the performance of various different tasks using speech. That is, the portable terminal is

operable to process the speech provided by the user, and to also respond accordingly, to facilitate a bi-directional voice dialog. As discussed in the Background, such terminals may be passed through a population of different users. There is no guarantee that, for a particular work shift, for example, the user will wear or carry the same portable terminal. As such, it becomes necessary each time for the user to specifically configure the terminal they use that day or for that shift. This is time consuming and inefficient. The present invention is directed to making such terminal use and configuration more efficient to thus increase the efficiency of the tasks using speech.

The cited prior art, and specifically the three main references of Anderson, et al., Michel, et al., and August, is a somewhat mismatched collection of different devices from which the Examiner has pulled what are argued to be different limitations from the claims. However, as is well established in an obviousness inquiry, a person of ordinary skill in the art does not simply look for parts, but rather would determine whether the prior art is applicable to the problem, and would appreciate the overall device or system as a whole, as well as its users and the problems it solves. Reviewing the three prior art references and applying those references to the currently-amended claims, it appears that the obviousness rejection and the cited references are somewhat disjointed.

First, turning to the base reference of Anderson, et al., the Examiner argues that the terminal is read as the application system and host adapter set forth in Anderson, et al. However, the Anderson, et al. system is primarily directed to a headset, and the

specific operation of that headset. The so-called “terminal” referred to by the Examiner is an application system such as a public telephone network, or an audio system, or a multimedia computer. Anderson, et al., teaches the use of an adapter to provide some of the functionality of the headset so that that functionality does not have to be built into the headset. Rather, the functionality can be provided at the adapter. This greatly simplifies the headset design and facilitates easier testing and use of the headset both during the manufacturing process, and later throughout the life of the headset. As such, the Anderson, et al. reference does not teach having the headset significantly affect the specific functionality of a terminal system, or in the case of the currently-pending claims, the voice functionality of a portable terminal. Rather, Anderson, et al. teaches a person of ordinary skill in the art to simply migrate functionality of the headset to a middle adapter of some kind that may be used between the headset and an application system, such as a telephone network.

To that end, in Anderson, et al. the user-related settings refer to the actual operation of the headset that would then be migrated to the host adapter. The Examiner refers to Column 8, Lines 47-61 to indicate that Anderson, et al. teaches a terminal configured for receiving a user characterizing signal, and then configuring the bi-directional voice capabilities of the terminal. However, as clearly noted in that section of the Anderson, et al. reference, that reference is directed to officially interfacing with the headset through the host adapter to optimize performance of the headset. There is absolutely no teaching in the cited language with respect to any effect that the headset

has on the operation and configuration of the terminal, and specifically the bi-directional voice capabilities of the terminal. Again, the host adapter is essentially a portion of the headset where the functional features are migrated to, rather than being specifically built onto the headset. That is the reason it is referred to as an adapter. It adapts use of the headset to some system without requiring the headset to be specifically hard wired.

Turning to Claim 1, Claim 1 has been amended to recite a portable terminal configured for being worn or carried by a user and operable to facilitate the performance of tasks by the user through speech. Claim 1 further recites that the terminal has bi-directional voice capabilities. A peripheral device that may be coupled to the terminal as recited in Claim 1 is configured to forward a characterizing signal for a particular user on at least one line for directing audio signals to the terminal. The user characterizing signals are claimed as being associated with one or more user-specific operational parameters of the terminal. They are not directed to a specific operation of the peripheral device as taught in Anderson, et al.

Furthermore, the application system as taught in Anderson, et al. is some centralized system, such as a public telephone network. Thus, Anderson, et al. does not by any means teach a portable terminal configured for being worn or carried by a user and operable to facilitate the performance of tasks by the user through speech. The host adapter taught by Anderson, et al. also cannot be the terminal, as the host

adapter is merely a functional part of the headset. The adapter does not provide any bi-directional voice capabilities, as claimed. Accordingly, Anderson, et al. fails to teach various limitations as set forth in Claim 1.

The Michel, et al. reference is cited to by the Examiner for the teaching of providing some signals, such as DTMF signals over audio lines. However, that reference does not teach various of the limitations set forth in Claim 1, which are not taught by Anderson, et al. For example, the Michel, et al. reference does not teach a portable terminal configured for being worn or carried by a user, and having bi-directional voice capabilities so that it is operable to facilitate the performance of tasks by the user through speech. Nor does Michel, et al. discuss or teach using a peripheral device to affect a terminal. Quite the opposite. Michel, et al. is directly to switching operating modes of a speaker/microphone peripheral using a PC. Accordingly, Michel, et al., as combined with Anderson, et al., does not provide the limitations set forth in Claim 1 such that those references would render Claim 1 obvious.

Turning now to the August reference, August is referred to for the teaching of an "application system" (utilizing the language of Anderson, et al.) that utilizes text-to-speech and speech recognition. The August reference refers to a telephony or computer system such as for the purpose of a call center. The Examiner refers to language in August directed to speech recognition models for males, females, children, people of different backgrounds, parts of the country, etc. The Examiner specifically

makes reference to FIGS. 8B and 8C regarding the selection of a model utilizing the caller identification. In that way, speech recognition might utilize the model selected for the particular caller identification.

However, as noted in the Interview with the Examiner, the August reference merely refers to general speech recognition within an overall centralized system, and particularly within a call center system or telephony, where a person calls in and provides a caller identification. With the specific caller identification, the central system, and particularly the speech recognition or speech processing in the central system, might be able to use the models associated with the caller identification. However, the Examiner has not pointed to a teaching in August regarding a portable terminal configured for being worn or carried by a user and operable to facilitate the performance of tasks by the user through speech. Nor does August suggest use of a peripheral device in configuring a speech processing terminal. As clearly set forth particularly in Column 1 in the Field of the Invention for August, the invention is directed to a network-based speech recognition for a particular subscriber who would call in. There is no teaching whatsoever of a portable terminal that is configured for being worn or carried. Nor is there a teaching of a terminal having bi-directional voice capabilities that interfaces with a peripheral. FIGS. 9 and 10 make reference to an ear bud or headset, but there is no teaching therein that the ear bud or headset would interface with a portable terminal, and thus, affect the operational parameters of that portable terminal. Again, as noted above, the greater number of references that must be chosen to

somehow construct the claimed invention generally significantly reduces the supposed obviousness of that invention. While August is directed to utilization of a speech recognition system, there is no teaching whatsoever with respect to the present invention outside of just basic speech recognition. Voice templates may be part of a general speech recognition system, but there is no teaching regarding having a portable terminal and a peripheral device that may be coupled together for the purposes of actually affecting the voice or speech operation of the terminal.

As noted above with respect to the Anderson, et al. reference, even if the system of August was somehow considered to be a portable terminal, Anderson, et al. teaches the utilization of using an intermediary host adapter for the purposes of affecting the construction or operation of the headset, not the operation of a portable terminal.

Furthermore, the August reference requires a particular action by a user, such as them calling into the central telephony system and providing an identification or ID. Presumably, modifying Anderson, et al. to include the functionality of August would require that similar step. Therefore, the August reference does not at all even recognize the problem of having a portable terminal that is configured for being worn and carried that must be reconfigured for each shift by a different user. Nor does August appreciate use of a peripheral to affect the bi-directional voice capabilities of the portable terminal.

Accordingly, the different construction and operability of the three different references, which includes the headset of Anderson, et al., the speakers and microphones of the acoustic systems of Michel, et al., and finally, the centralized

telephony system of August, would not provide any particular motivation or teaching to a person of ordinary skill in the art to somehow create the present invention. Therefore, it could only be through a piece-gathering, hindsight exercise that a person of ordinary skill in the art would somehow be taught or motivated in the direction of the present invention. Furthermore, even if the three different references were combined together, they still would not teach various of the elements set forth in the claims, such as a portable terminal configured for being worn and carried by a user and operable to facilitate the performance of tasks through speech. Furthermore, none of the references teach use of a peripheral device for configuring the voice operation of the portable terminal, or specifically configuring the operational parameters that have to do with a bi-directional voice capability of the terminal. Again, the main Anderson, et al. reference is directed to configuring a host adapter such that the host adapter and scaled-down headset actually act and operate as a headset. There is no suggestion that somehow a user can personally configure a portable terminal utilizing a peripheral device, such as a headset.

Therefore, the invention as recited in Claim 1 would not be rendered obvious by the Anderson, et al./Michel, et al./August combination, as even such a combination would not teach all the elements recited in the claims. Accordingly, Claim 1 is in an allowable form. Dependent Claims 3-16 and 18 each depend from Claim 1, and thus, would be allowable for that reason. Furthermore, each of those claims recites a unique combination of elements not taught by the cited art.

Independent Claims 19, 29, 40, and 63 each have been amended along the lines of the amendments to Claim 1. Furthermore, each of those independent claims recites a unique combination of elements or methods steps similar to those recited in Claim 1. As such, each of those independent claims also would not be rendered obvious by the Anderson, et al./Michel, et al./August combination of references. Each of the pending dependent Claims 21-23, 25-28, 31-39, 41, 44-46, 48-54, and 66 depends from one of those allowable independent claims, and thus, would be allowable. Furthermore, each of those dependent claims recites a unique combination of elements and/or methods steps such that those claims would not be rendered obvious by the cited prior art.

For certain of the dependent claims, the Examiner calls upon still another reference such that the obviousness rejection is based upon four different references. For example, with respect to Claims 14 and 38, the Examiner cites to the reference of Helms, U.S. Patent No. 5,561,710. However, the Helms reference is merely directed to a battery component. Thus, the four-reference combination of Anderson, et al./Michel, et al./August/Helms would not render obvious the inventions as recited in Claims 14 and 38 that depend from Claims 1 and 29, respectively.

With respect to Claims 11-12, 27, 35-36, and 51-52, the additional reference of Hallikainen, et al., U.S. Patent No. 5,797,102 is cited for an auxiliary device that can transmit an identification message automatically. However, that Hallikainen, et al. reference would not provide the claim limitations that are missing in the other three

references such that the four-reference combination of Anderson, et al./Michel, et al./August/Hallikainen, et al. would render obvious those dependent claims.

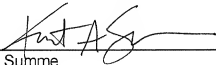
Accordingly, Claims 11-12, 27, 35-36, and 51-52 are allowable over the cited art.

In light of the foregoing, it is respectfully submitted that the present Application is in a condition for allowance and notice to that effect is hereby requested. If it is found that the present amendment does not place the Application in a condition for allowance, Applicants' undersigned attorney requests that the Examiner initiate a telephone interview to expedite prosecution of the Application.

Applicants are submitting the fees due for the one-month extension of time and RCE with this Response. If any additional fees are necessary, the Commissioner may consider this to be a request for such and charge any necessary fees to deposit account 23-3000.

Respectfully submitted,

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